THE GENESEE FARMER.

VOL. VII. ROCHESTER, N. Y. DECEMBER 23, 1837. NO. 51.

PUBLISHED BY LUTHER TUCKER.

TERMS.—The Farmer is published every Saturday, making an annual volume of 416 pages, to which is added a Title-page and Index, at the low price of $2,50, or $2,00 if payment is made at the time of subscribing.

☞ All subscribers must commence with the volume, Jan. 1, or with the half volume, July 1. No subscription taken for less than six months.

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GENESEE FARMER.

SATURDAY, DECEMBER 23, 1837.

FOOD.

It appears to be a wise dispensation of Providence, that has provided that each step in the advance and development of matter, shall furnish the means of a higher and more complicated material existence. This truth can be distinctly traced in every species of organization, but in none more conclusively than in those which are intended for food, or a supply of nutrition to animals and man. The ox could not appropriate the simple elements that constitute flesh and bones directly from the soil; it was necessary that the vegetable organization should intervene, to take up and prepare these elements for his use; and man, omniverous as he is, shows little inclination to resort to herbage when he can get roast beef, and the example of Nebuchadnezzar in going to grass, has as yet obtained but few followers.

That man was destined to eat meat, is demonstrated from his anatomical conformation; and such destination agreeing with his inclination, it is probable, in spite of fashionable lectures on vegetable diet, that he will eat meat whenever it can be procured, which, fortunately for the laboring man of this country, is very easily done. Such being the case, it becomes an important question in domestic economy, so to cook or prepare this essential part of sustenance, so as to have it the most nutritious, and at the same time waste the least in cooking.

Flesh, in all its varieties of muscle, membrane, and tissues, is composed of *gelatine, fibrine, albumine,* and *ozmazome;* but these principles do not exist in all flesh in the same proportions, and they vary according to the age and species of the animal. Gelatine abounds in young animals—in older ones fibrine prevails. Albumine is found more or less in all. Ozmazome is scarcely present in the flesh that is white, as veal and pullets, but in beef or full grown animals, is abundant. To this last substance broth owes its color, its aromatic odor and agreeable flavor. To the proper proportion and combination of these substances the nutritive properties of flesh are owing, and when these are destroyed or dissipated in cooking, the value of meat for food is in the same proportion lessened.

Meat is usually prepared for food by boiling or roasting, yet whatever the mode may be, there must be some loss, consisting chiefly of juices, soluble matter, and fat. Professor Wallace of Edinburgh, instituted a series of experiments to ascertain the relative amount of loss by the processes of boiling or roasting, and admitting the quantity of bone in each case to be the same, which was near the fact, the result was as follows:

100 pounds of beef lost in boiling,	.....	26½ lbs.
100 do. do. in roasting,	.....	32 "
100 do. do. in baking,	.....	30 "
100 do. of legs of mutton, averaging about nine and a half lbs. each, lost in boiling,	....	21½ "
100 lbs. shoulders of mutton, averaging ten lbs. each, lost in roasting,	.....	31½ "
100 lbs. of loins of mutton, averaging eight and three-fourth lbs. each, lost in roasting,	.....	35½ "
100 lbs. necks of mutton, averaging ten pounds each, lost in roasting,	.....	32½ "

By these experiments it appears that in boiling beef or mutton, the loss is less than in roasting; and that meat loses in the cooking from one-fifth to one-third its weight. The average loss in boiling and roasting, according to Professor Wallace, was 28 per cent., but while legs of mutton only lost 21 pounds in boiling per hundred, loins of mutton in roasting lost per hundred 35 pounds.

In preparing his volume on Domestic Economy for Lardner's Cyclopedia, Professor Donovan instituted a more extensive and rigorous set of experiments, in order to ascertain the actual loss in cooking by different methods, and the cost to the consumer of each pound of meat of the various kinds divested of bone, and purchased for cooking at the usual market price. This examination gave rise to some curious results, embodied in a table, a few items of which we have selected as showing the difference in price between raw and cooked food, and the average loss in cooking.

Kinds of food		Cost per lb. raw.	Cost per lb. cooked.	Loss per cent. in cooking.
Salted beef boiled,	.....	6d.	..... 7¾d.	 13
Salted brisket of beef boiled,		6..	..... 8½	 18
Legs of mutton	do.	8.	 10	 10
Salt pork,	do.	8.	..... 10½	 13
Shoulders of mutton roasted,		7.	 11	 28
Ribs of beef	do.	8.	 11	 18
Legs of mutton	do.	8.	 12	 21
Sirloin of beef	do.	8.	 13	 20
Haunch of venison	do.	–.	 46	..... —
Woodcocks	do.	–.	 192	..... —
Quails	do.	–.	 288	..... —

In the experiments the meat was carefully dissected from the bones, so as to ascertain the exact amount of flesh, and the loss in cooking, and consequently the difference in price before and after. In summing up his results Mr. Donovan says:—"It appears that the flesh of a woodcock sometimes costs 16s. per pound. But the flesh of the quail is still more expensive. This bird fattened is frequently sold at 3s., and when allowance is made for the loss in cooking and the bones, the meat may be estimated at two ounces, which brings the cost of the cooked flesh to £1 4s. per pound, (or about six dollars.) Those to whom such morsels are necessary are not to be envied." The price of venison cooked does not vary much from one dollar a pound; dear buying surfeits we should think.

From these experiments of Messrs. Wallace and Donovan, it is clear that where economy is consulted the greater part of the meat cooked will be boiled; as the loss is decidedly less than by roasting, and experience has shown it to be nearly or quite as digestible and nutritious when cooked in this way as in any other. In whatever way flesh is cooked, it should be *done;* but this does not mean that it should be roasted, or fryed, or baked to scraps. Cooked properly, it is more easily digested, and far more nutritious, and the loss is generally less, than when devoured raw as with the Abyssinian, or roasted to a crisp as is the custum in Turkey. Every thing that relates to domestic economy should attract the notice of the farmer; and where flesh is as much an article of food and of comfort as with us, the daily saving that may be effected by boiling in preference to roasting should not be overlooked. The rich may be allowed to consult their appetite at the expense of their health if they choose; that man is fortunate who is able to gratify the first without endangering the last.

Contagious Typhus among Cattle.

Such is the name given by Professor Delafond of the veterinary school at Alfort, to a disease among cattle, the history of which, from its first well authenticated appearance about a hundred years since, he has been engaged in invertigating, and which at each periodic return appears to have been as fatal to cattle as the black death, small pox, plague, and cholera, have proved to the human race.

The best accounts of the upizootic typhus, makes it originate in Hungary in 1711, whence it spread into Italy, Germany, Switzerland, Piedmont, Holland, France, and England; taking about 7 years in its circuit, and setting at defiance every effort made to check its advance. In Piedmont 80,000 cattle died in a few months; in Holland more than 200,000 beasts perished; and in the other countries it visited, it was equally fatal, the total number destroyed during the seven years being estimated at more than 600,000.

Twenty years afterwards the same disease appeared in Bohemia, among the cattle collected for the use of the French army occupied in the seige of Prague. It again overrun Europe, taking nearly the same course as before, and was conveyed from Holland to England. All the skill of the most celebrated physicians of Europe was put in requisition to arrest its ravages, but without the least effect; and when after ten years it ceased of itself, it was estimated that not less than three millions had been swept away.

During the next twenty years Europe was free from this epidemic, but in 1771 it reappeared in Holland and committed the most dreadful ravages. In one year in the province of Friedland 96,000 cattle died; in South Holland, 115,665; in North Holland, 225,831; and it spread into Flanders and France, but the whole number of cattle that died in these countries was never correctly estimated. Scarcely cattle enough however were left to till the soil, and on the borders of the Mediterranean, which had escaped the last visitation, more than 150,000 cattle died.

During the wars of the French Republic, in 1793, 4, and 5, and of which Italy was the principal theatre, the typhus again broke out, and following the course of the armies, destroyed in a few years 3,500,000 cattle. 1790 it appeared among the cattle collected for the French army of the Rhine, and spread with frightful rapidity over the departments of that part of France, and part of Holland, destroying not less than 200,000 cattle. At this time a detailed calculation, made from authenticated statements, was made by Dr. Faust, and it appeared by these returns, that the number that had perished in Belgium and France alone, since its appearance in 1711, was not less than ten millions.

In 1814–15 the combined armies arrived in France, with their hordes of Hungarian bullocks, and contagious typhus soon broke out and spread with fatal rapidity. The return of peace, however, checked its progress, and it soon disappeared; since which time it has scarcely been heard of as an epidemic, in any country.

The researches of the Professor have established the following facts;—1st. That from 1711 to 1814 contagious typhus has appeared about once in twenty-three years. 2d. That on each apppearance it seems to have arrived in the train of Hungarian cattle. 3d. That it is strictly contagious, and spreads in this way alone.

Wherever war long continues to rage, typhus fever breaks out among cattle. These two destroyers of men and cattle appear in some manner inseparable. A comparison of the times specified above as the period of its ravages, with the history of the same time will fully establish these facts. The causes of this connexion between the march of armies, and the propagation of the typhus have been detailed with great force in a report by M. Rodet. Crowded together in large masses—breathing an impure and vitiated air—forced to make long and fatiguing marches—at one time sleeping in the cold open air, and then crammed into stables or enclosures—forced by thirst to drink at times of the most impure and stagnant water—their food scarce, or of a bad quality, it is scarcely possible they should escape typhus; or that when once the disease has originated, it should become fatally contagious.

In the origin and spread of this disease, the farmer will find a strong argument for the necessity of regular feeding, pure water, free ventilation, and plenty of room for his flocks and herds, if he would avoid the origin or spread of disease among them. American farmers are unacquainted with many of the diseases that exist in the older countries of Europe; but there can be no doubt that fatal diseases among sheep and swine in this country may be sometimes traced to the same causes designated above, viz; crowded enclosures and impure air; errors, which, wherever they exist, should be carefully corrected.

THE SWALLOW.

The following from a Scotch journal is interesting, as illustrating the peculiar habits of these migratory birds:

"About 8 o'clock in the morning of Wednesday last, the body of birds which appear to have constituted the northern division of those that make the British isles their summer's residence, passed over Perth, on their way south, in such incalculable numbers, that for some minutes the sun was as much darkened as if a cloud had passed over its face. Their passage was slower on account of the circling motion in which they advanced, their gyrations forming high circles, apparently each in a separate course. Their course was due north and south, and by nine o'clock the last straggling of the rear passed. The time of their departure seems to have been nearly a week in advance of the usual period, and the weather seers are naturally predicting an early if not a severe winter from this circumstance."

We witnessed the present year an assemblage of the common barn swallow, numbering several hundreds, preparatory to their migration. The place of rendezvoux was a large meadow, and we were much amused for an hour in observing their gyratory or circular movements, seemingly preparatory to a general flight. Large numbers were at all times resting or fluttering about the ground, but the main stream moved in an oblong circle, some twenty rods in length by six or eight in width. There was no meeting or jostling, as the course of all was the same, from right to left; and when they at last moved off, the same course, and nearly the same regularity of proceeding, was continued. Their movements in their flight reminded us of that of a swarm of bees when making for the woods, as these always fly in circles, but at the same time continue to advance rapidly, and, as do swallows, from right to left. This advance is effected by making one side of the oblong circle when moving about as long again as the other, and this is done with an exactness surprising to the observer. There is a cause for every thing, and we should be pleased to have one assigned for this movement from right to left, and its uniformity. Can it be because the right wing of birds and bees is more muscular and powerful than that of the left, and for the same reason, viz: it receives a greater proportion of blood, or the circulating fluids, than the left? Or is it owing to the same general, but as yet undeveloped cause, that impels all floating bodies to assume a similar course of gyration?—Ed. Far.

Succession of Flowers on Fruit Trees.

Now and then a case occurs even in our cold latitudes that reminds one of the continued flowers and fruits that succeed or rather mingle with each other on the same tree in the warmer zones of the south. Such instances prove that nature is every where the same, and that the annual blossoming which we witness of our fruit trees in a more favored climate, would become, like that of the orange and pomegranate, nearly perpetual. We this summer saw on a cherry tree of the black Morello species, a branch covered with its beautiful white blossoms, at a time when the rest of the tree was loaded with fruit nearly fit for gathering, and the contrast between the dark fruit and the white flowers was very striking. The cause of this phenemenon we did not ascertain; it probably existed in the branch that produced the late flowers, the result of some injury that retarded their formation at the proper season. We have lately noticed the following instance of the same nature, in the Portsmouth N. H. Gaz. "Mr. Joseph B. Verney of Newington, has a tree in his orchard, which has bloomed four times this season (in the month of June, July, August and September respectively;) the three first blooms producing fruit, but the last was blighted by the early frost. The novel spectacle was exhibited of a tree bearing three different grades of apples, beautifully interspersed with blossoms of the fourth family. We have specimens of the fruit from the second and third blooms." Perhaps trees that have this peculiarity might perpetuate it; and in a series of generations, if followed up with the care evinced by Van Mons, apple trees, or fruit trees of other varieties, might be raised, which would furnish flowers as well as fruits through our summers, if not, as in the tropical regions, through the year.

Vitality of Insects.

The alleged production of organized and living animals, by Mr. Crosse, through the agency of galvanism, has, as may well be supposed, directed the attention of philosophers to the subject, and elicited a great variety of experiments to ascertain the vitality of insects and the extent to which a state of torpidity might be retained and the power of revivification remain. The result of some of these experiments were detailed at the late Liverpool meeting of the British Association. Mr. Gray said that experiments showed that it was no proof that Mr. Crosse's insects could not have been produced from the water used in his experiment, because it was boiled, as that would not be sufficient to destroy the eggs of insects therein. Mr. Macleay remarked, that galvanism would revivify eggs of insects that could not be restored by other known methods; and that this favorable circumstance operated in producing from the egg the insects in question. Mr. Gray stated that prussic acid had lately been used for the purpose of destroying insects at the British Museum, particularly those infesting a mummy. Some of the larvae of the common Musca or fly having been put into the acid, remained uninjured after two or three days exposure. It was well known that seeds would retain their vitality for an indefinite period of time, and there was no reason why any limit should be put to the vitality of the eggs of animals.

Eggs.

There was a time when it was customary to designate the gay and chivalrous Frenchman as a 'frog eating' animal; but we think if a late statistical table of Le Grand published at Paris, is correct, the appellation of 'egg-eating,' would be more appropriate. According to this writer, the quantity of eggs consumed in Paris amounts to eighty millions and a half annually, or about 115 eggs to each individual. A Parisian makes a good breakfast on a boiled egg, and a cup of coffee, or a glass of sugar and water. In addition to what is consumed at home, France exports at the present time eggs in immense numbers. Twenty years since the exports did not exceed two millions; in 1836 the exports amounted to nearly 100 millions. Of these about 80 millions went to England, and the remainder to other parts of the world, including the United States. Yes, it is an ascertained fact, that in addition to importing some eight or ten millions worth of breadstuffs last year, we imported eggs to such an extent that it would make a sad hole in the funds of most of our banks to meet these deposites of the French fowls. This will not do. Our farmers must multiply the breed of hens of which it has been sung—

"On week days they lay two eggs
And on Sundays they lay three!"

At any rate some of these habits of running abroad must be broken up; and the most effectual way of doing it, is by raising at home what is necessary to eat and to drink, as well as to wear; this in the main we can do, and this we must do, ere we shall be qualified to maintain among the nations of the earth the *independent* rank we have assumed.

BEST VARIETIES OF POTATOES.

Judge Buel gives the following list, as the best kinds known in the vicinity of Albany:

1. *Kidneys*, or *foxites*, white flesh, rather small, and seemingly deteriorating, as an old variety.
2. *Pink eyes*, white flesh, rather kidney shaped, yield well, and are yet in their prime.
3. *St. Helena*, very similar in flesh, shape, color and quality to the foregoing, without the pink eyes, or blotches—to us a new variety.
4. *Early kidneys*—real kidney shaped, smooth, white and of fair size—the best early variety.
5. *Mercer*—well known and deservedly liked.
6. *Salt St. Marie*—the true kind, large, long, dark colored and good.
7. *Liverpool blues*—colored, good size and productive. Boil white, and may be placed in the first class for the table.

The foregoing we esteem the best kinds. There may be other kinds equally good, and some that we have enumerated may be known by other names. The *forty-fold* has been highly commended for its productiveness and good qualities, with what truth we will not venture to say.

The Vine in Pennsylvania.

Notwithstanding the generally unfavorable state of the season for fruits requiring an elevated temperature to arrive at perfection, the cultivators of the vine in the Key state, appear to have been liberally rewarded for their labor, and encouraged to greater efforts in rearing grapes both for the table and for making wine. Mr. Chandler of the U. S. Gazette, in a letter from Harrisburgh, says—"Some weeks since I mentioned the cultivation of grapes at Reading, and expressed a hope that attention might be paid to this important culture. I now learn, that a few vines in on gentleman's garden, produced two barrels of wine, and another gentleman has made 200 gallons, one half of which he sold immediately for one hundred dollars, deliverable in December next. I am not very partial to wine making, but I speak of raising grapes as a business matter."

Mr. Chandler is right; for in some respects the wine and cider making business may be considered about on a par. So long however as wines cost the country millions annually, good policy requires that this money should be retained at home for distribution among those who might become vine growers in our land; and no man who is fond of a good apple, or knows the value of a dessert of delicious grapes, (and grapes may be kept fresh for eating for months) will do otherwise than rejoice at the successful culture of the appletree or the vine. All that adds to the number of our innocent enjoyments, is worthy of our notice, and should be regarded with approbation.

LINCOLNSHIRE AND BAKEWELL SHEEP.

L. D. Clift, of Somers, Westchester county, in a letter to the Cultivator, gives the following account of a lot of these improved breeds of sheep, of which he is the owner:

I find, by reference to my memorandum book, their weight of fleeces as follows:

16	imported Lincolnshire ewes,			109 lbs.
1	do.	do.	2 years old, buck,	10
1	do.	do.	4 years old, buck,	8
1	Bakewell or Leicester buck,			6
15	Lincoln wether lambs,	cross or half bloods,		101
25	Lincoln ewe	do.	do.	153
6	Lincoln buck	do.	do.	42

65 sheep of the Lincolns, gave total wool, 427 lbs.

Thus giving a fraction over 6 lbs. 9 oz. per head. That you may contrast the difference between my Lincolns, and my other improved sheep, Bakewell and Leicester, and kept in the same manner, which is as follows:—70 ewes, including 6 common or native sheep, 265 lbs. which is a fraction over 3 lbs. 12 oz. per head, giving a difference in favor of Lincolns, of 2 lbs. 13 oz. on the general average per head, besides a better carcass, and a much more hardy constitution.

The weight of yearling bucks is as follows:

No. 1,	188 lbs.	No. 4,	166 lbs.
No. 2,	186 lbs.	No. 5,	156 lbs.
No. 3,	180 lbs.	No. 6,	152 lbs.

It is proper to remark, that these bucks have been kept only with a view to their thrifty growth, and not to lay on flesh, by extra feeding with grain of any kind. I think that a number of these sheep, *grown to maturity*, say at three years old, will give 300 lbs. at least in carcass alive.

Wheat and Peas, Alternately.

Professor Eaton states, in his Agricultural Survey of Rensselaer County, that on the Knickerbacker estate in Schaghticoke, the soil of which may be considered as the standard of excellence, containing 15 per cent of animal and vegetable matter, and a large proportion of carbonate of lime, the following simple system of rotation is pursued:

The rotation method which has always been adopted by this family, (they have occupied it one hundred and twenty years, and five generations have been born upon it,) has been in the following simple order. Certain fields have been alternately devoted to wheat and peas. Those fields are sowed to peas in April. Immediately after the peas are harvested, it is ploughed three times, and sowed, from the 10th to the 20th of September, to wheat. After the wheat harvest it is pastured until winter; but no grass or clover seed is ever sown upon it, as these grow up spontaneously in great abundance. Sometimes oats and flax are substituted for peas. Thus a crop is harvested on each wheatfield every other year,—one year

wheat, the other, peas, oats, or flax. Though no manure is ever applied to this land, it has yielded from twenty-five to thirty bushels of wheat per acre every other year, for ages past.

Certain other fields are devoted to Indian corn, potatoes, &c. In the culture of these there has been nearly the same uniformity. 1st. Corn and potatoes. 2d. Spring-sown grain. 3d. Wheat. Thus corn returns every fourth year.

The whole of Scaghticoke flatts, consisting of almost two thousand acres, is very similar in quality, and cultivated in a similar manner. It is wholly river alluvion, in which the Hosick and the Tomhanick unite their waters.

HOW TO RAISE POTATOES.

The following rules for the culture of potatoes, are from Noah Webster:

1. The seed potatoes should be those of full growth.
2. Cuttings produce more than whole potatoes.
3. Potatoes will not come to perfection without the sun. Therefore nothing is so prejudicial as to plant them too thick, especially on a rich soil.
4. The cuttings, in drills, where the land is light, will answer well at nine inches distance.

CLARK CORN.

Mr. R. Jacqes of Newberry, (Mass.) describes in the N. E. Farmer, a variety of corn known by the above name, which he received from Barnstead, (N. H.) as follows:

I have planted of it 3 years. The land on which I raised my best corn this season, was grass land, 3.4th of an acre, broken up the 10th of May, about 7 inches deep; harrowed and manured in the hills, with rotten stable manure; about 3000 hills to the acre; a common shovel full of manure in each hill, but it will answer to put more hills on an acre. It was planted 12th of May, and and was hoed twice. I put 5 kernels in each hill, without soaking. Usually there were 2, 3, and some hills 4 ears on a stalk. The land was brown loam, southerly ascent, 5 or 8 degrees. The corn was ripe the first part of September, and might have been gathered by the 25th. In good seasons, I think it would have yielded 60 bushels to the acre.

AGRICULTURAL SOCIETIES.

There is no better way of convincing the incredulous of the beneficial influence of Agricultural Societies and Agricultural Journals, than by the exhibition of facts in relation to the improvements which these combined influences have already effected. In a debate on a bill to renew an act for the "Encouragement of Agriculture," the Rev. M. Allen in the Legislature of Mass. said—

"It has already been suggested that the soil of the county, from which I came, is not the most favorable for agricultural pursuits. The expense of cultivation there is thought by some to exceed the amount to be derived from it. This was the prevalent opinion before the introduction of modern improvements. The operations of an Agricultural Society have proved that labor and skill can make even despised soils productive. I suppose that ten bushels of rye to the acre, twenty of Indian corn, one ton of English hay, and two hundred bushels of potatoes were formerly considered as average crops. Since premiums have been offered, we have claims for from forty to fifty bushels of rye, from one hundred and fifteen to one hundred and twenty-two of Indian corn, from three to four tons of English hay, and from four to five hundred bushels of potatoes. Our improvements have not been confined to single acres, in several instances the products of entire farms have been more than quadrupled."

On the Use of Gypsum.

Walter Beecher, of Madison County, in a communication published in the Memoirs of the Board of Agriculture of this State, gives the following instance of the beneficial effects resulting from the use of Plaster or Gypsum:

Some years since, I purchased about ten acres of land, (the timber of which was oak, and the soil of a chocolate color,) that had been ploughed constantly every year for twelve years. The crop of wheat that was on it at the time of purchase, did not yield more than twelve bushels to the acre. In the spring, I seeded it with clover, after which I sowed one hundred weight of plaster to the acre, and the pasture that season was excellent. After having sown the same quantity of plaster to the acre for three years, I ploughed the land very deep in the month of June, and having ploughed twice afterwards, I sowed one and a quarter bushels to the acre of wheat, and harrowed it twice. My wheat, the next year, yielded forty bushels to the acre. I have continued sowing plaster every year for four years, and my pasture has been excellent, and not surpassed by any in the county; the land is in good order and in a high state of cultivation, resulting from the important use of plaster.

I have used plaster on all or almost all kinds of land: on dry land it answers a good purpose; on land that is worn out it is the most essential; on moist or muck land, (as it is called,) plaster will be of no use until the muck is worn off; on dry sandy land, and in dry seasons, the plaster is of the greatest importance.

From the Complete Farmer.

Formation of Soils.

A farmer should be well informed of the nature of soils. and of the various plants adapted to them. Some useful plants flourish best in what is called poor land; and if cultivators were perfectly acquainted with the art of adapting plants to soils, much manure might be saved, which is wasted by injudicious and improper application.

It is supposed by geologists that the whole of this earth originally consisted of rocks, of various sorts, or combinations. These rocks by the lapse of ages, and exposure to air and water, became disintegrated or worn in part or altogether to fine particles, which compose what is called earths or soils. These soils are chiefly silica, [sand or earth of flints] lime, [or calcareous earth] alumina, [clay] and magnesia, [a mineral substance.] With these are blended animal and vegetable matters in a decomposed or decomposing state, and saline, acid, or alkaline combinations.

Plants are the most certain indicators of the nature of a soil; for while no practical cultivator would buy or undertake to till land of which he knew only the results of chemical analysis, yet every farmer and gardener, who knew the timber and plants a soil spontaneously produced, would at once be able to decide on its value for cultivation.

It was a maxim of Kliyogg, a famous philosophical farmer of Switzerland, 'that every species of earth may be instrumental to the improvement of another of opposite qualities.' All sands, are hot and dry—all clays, cold and wet; and, therefore, the manuring sandy lands with clay, or clay lands with sand, is best for grain and pulse. But it is not the natural soil only that the farmer ought to consider, but the depth of it, and what lies immediately underneath it. For if the richest soil is only seven or eight inches deep, and lies on a cold wet clay or stone, it will not be so fruitful as leaner soils that lie on a better under stratum. Gravel is, perhaps, the best under stratum to make the land prolific.

The best loams and natural earths are of a bright brown, or hazel color. Hence, they are called hazel loams. They cut smooth and tolerably easy, without clinging to the spade or plough share; are light, friable, and fall into small clods without chapping or cracking in dry weather, or turning into mortar when wet. Dark gray and russet moulds, are accounted the next best.—The worst of all, are the light and dark ash colored.—The goodness of land may also be very well judged of, by the smell and the touch. The best emits a fresh pleasant scent on being dug or ploughed up, especially after rain; and being a just proportion of sand and clay intimately blended, will not stick much to the fingers on handling. But all soils, however good, may be impoverished, and even worn out, by successive crops without rest, especially if the ploughings are not very frequently repeated before the seed is sown.

If we examine tracts of land which have not been cultivated, we find nature has adapted different kinds of plants to most of the distinguishable varieties of soils; and though some belonging to one may for some cause or other, be found on lands of a different quality, they seldom thrive, or perfect their seeds so as to become general. The great care of the farmer ought, therefore, to be, by proper mixtures, to reduce his land to that state and temperament in which the extremes, of hot and cold, wet and dry, are best corrected by each other; to give them every possible advantage flowing from the benign influences of sun and air; and to adopt such kinds of plants as they afford in this state the greatest nourishment to; and to renew their fertility by a judicious allowance of the most proper manures. Where these things are done, there are few spots so unfriendly to cultivation as not to repay his expenses and labor, with a plentiful increase. But without these, the best tracts of land will in time become a barren waste, or produce little but woods.

The color of soils is important. The Farmer's Journal observes, coal ashes were sprinkled over half the surface of beds, sowed with peas, beans, &c., and on these the plants invariably appeared above ground two or three days earlier, obviously on account of the increased warmth; it being a well known fact, that dark colored bodies absorb caloric more readily, and in larger proportions than those of a lighter hue.

Soils which absorb the most moisture are the most fertile. Sir Humphrey Davy observed, 'I have compared the absorbent powers of many soils with respect to atmospheric moisture, and I have always found it greatest in the most fertile soils; so that it affords one method of judging of the productiveness of land.'

The methods of improving soils are too numerous to be here fully specified. We will, however, quote one mode of restoring worn out fields to the fertility of new lands, or lands lately cleared from their aboriginal growth of timber, quoted from a '*Dissertation on the mixture of soils*,' for which the author, the Rev. Morrel Allen, of Pembroke, Mass., was awarded a premium by the Plymouth County Agricultural Society.

'Particles in a soil, which had long been in contact, and, in consequence of long connection lost much of the energy of their action on plants, are separated in mixing soils, placed in new connections, and act with renewed vigor. But the most permanent and best effects are always expected from the mixture of soils of different qualities. When the object is to produce as much immediate influence as possible, merely to assist one short rotation of crops, to have the application we make act chiefly as manure, then we may take our materials from any situation, where we know vegetable substances have fallen and decayed.

'We may go into forests, and in certain stages of the growth of the wood, without any perceptible injury, skim the surface of the whole lot.—This soil of the woods, carried in sufficiently large quantities on to old fields, will restore them to original productiveness. And this will sometimes prove an inexhaustible resource for renewing old fields; for as often as the fields decline, the soil in the wood lot will be again renewed and fit to remove. For the same purposes the earth should be carried from the sides of walls and fences, where the leaves have been lodged from the forests. It should also be carried from hollows and temporary ponds, which in certain seasons of the year, become dry, and afford immense quantities of vegetable matter, in different stages of decomposition, and suitable to apply to any kind of soil.

'Where streams of water occasionally overflow the banks, an abundance of vegetable and earthy matter is lodged on the meadows, which in many cases, especially where there is not much extent of meadow to receive the substances conveyed by the stream, it is prudent to remove on to higher land. It will there act as manure, and at the same time gradually alter the texture of the soil, rendering it more retentive of dew and rain, and easily penetrated by the fibrous roots of plants. Of the value of those substances, which are carried in streams of water, to enrich soils, we have the most convincing proof in the unexampled productiveness of interval lands. It is not exclusively the vegetable substances carried on to these lands, which make them so astonishingly productive; there is a portion of every kind of soil existing in the surrounding country, annually carried on with the vegetable substances. Intervals are composed of every sort of earth the water can reach and remove. This circumstance may properly encourage the mixtures of many kinds of earth, even when there is no particular evidence that each kind is especially adapted to remedy any deficiency in the soil, which we would improve. There is less hazard in administering medicines in great profusion to cure diseases in the soil, than in the human body. What is always disgraceful in the physician, viz. to boast the number of his applications, and the judgment with which they have been made, as it is impossible for them to do any harm, if they do no good, may in the farmer, often be a course worthy of praise. In stepping out of the beaten path of habitual practice, and calling attention to experiments, which to some may look very simple, and to others very absurd, we may become instrumental in the discovery of highly important truths.'

Arthur Young lays it down as a maxim, that a strong, harsh, tenacious clay, though it will yield great crops of wheat, is yet managed at so heavy expense, that it is usually let for more than it is worth. Much money is not made on such land. The very contrary soil, a light, poor, dry sand, is very often, indeed, in the occupation of men, who have made fortunes. Some permanent manure is usually below the surface, which answers well to carry on; and sheep, the common stock of such soils, is the most profitable sort he can depend on.

Dr. Philip Syng Physic, the eminent surgeon and physician and lecturer, died yesterday morning after a lingering illness. Few professional men in this country have attained a more enviable fame.—Dr. Physic had retired from his professorship in the Medical School of the University of Pennsylvania; but so intimately was his name connected with that institution, that the annunciation of his death caused a suspension of lectures until the ensuing week.—*United States Gazette.*

Michigan Wheat.—The Detroit Free Press says that there has been one million five hundred thousand bushels of wheat raised in that state during the last year.

COMMUNICATIONS.

Farmers should Receive and Impart Instruction.

Mr. Editor—Spring, the active period of preparation, buoyant with hope and gladness, and furnishing the husbandman with full employment for all the energies of mind and body—summer, full of toil, full of anxiety; yet the connecting link between hope and fruition—and Autumn, the gladsome season when the farmer beholds with emotions of delight and gratitude, his barns and granaries filled to overflowing with the rich bounties of a kind Providence, have been once more given us, and we find ourselves again in the enjoyment of the long evenings of December.

The Almighty has furnished man with a progressive mind; and tho' in its uncultured state it is like the marble in its native quarry, yet like the marble it may be separated from the rubbish with which it is encumbered; and having undergone the fine chisselings of art and science, be presented to view as a thing beautiful in itself, and worthy of the labor it has received.

But, the *farmer*—the humble, unassuming farmer, has long been looked *down* upon; even in this happy land of legal equality—this, our happy America, where every man may by his own exertions rise to a sphere of usefulness and respectability, if not of wealth, he has been viewed as belonging to an inferior and degraded caste.

Why is it thus? Why should that class of community which is emphatically the one by which all the others are fed and clothed—by which their liberties are won and guaranteed—which is the strong pillar that supports our constitution—which unfurls the ten thousand sails that whiten the broad ocean—which spreads far and wide the field of enterprise, and is continually opening new channels to wealth and glory:—why is it, I ask, that that class which the Creator has evidently marked out as the one to fill the highest sphere of usefulness, so far as regards the temporal welfare of man, should be viewed by the scientific, the wealthy, the noble, as unworthy of exalted regard? In nature, science, and art, there is no effect without its corresponding cause. In the present instance, we find the cause in the prevailing ignorance which exists among them; that is the true cause of their being looked upon as filling a humble, low station of life. Shall we wonder if some come almost to the conclusion that farmers have forgotten the dignity of the nature with which they are invested?

But, happily for the prosperity, the credit, the glory of the husbandman, the day of ignorance is passing away. Brilliant stars have already arisen; others are rising: the pens and energies of the learned are enlisted—agricultural publications, teeming with useful information are spreading through the length and breadth of the land, and all as co-workers in the business of dispelling the clouds of ignorance which have so long hung over us. The farmer is beginning to learn that he is endowed with mind—that he may rise high as the highest in the scale of existence.

No one, who is a practical farmer will deny that his is a toilsome life; nor will he deny that it is toil which makes repose sweet. It is the laboring man's whose sleep is undisturbed and invigorating. It is the farmer whose mind should be calm when he lies down, and when he rises up, for his is a life of independence, regularity, and if freedom from the caprices of the multitude is peace, then is his also a life of peace, and, although when our first parents partook of the forbidden fruit

"Which brought death into the world and all our woe,"

they drew down upon themselves and entailed upon their posterity the curse, "in the sweat of thy brow shalt thou eat bread," who that has experienced the sweet sleep of the night which a day of toil bestows, will deny, that even in that *curse* there is a blessing?

It may be asked, why do not farmers read more? Reformation is always slow with large communities. They do read more than they did ten years ago,—they have received an impulse through the agricultural journals of the day by which they are urged forward in the acquisition of useful knowledge—that knowledge which expands the mind, improves the heart, and betters both our moral and physical condition.

I do not make the above allusion to agricultural journals, sir, without the assurance that the assertion has a good foundation; and not without the hope, also, that it may prove an encouragement to those enterprising publishers, who, having the best good of their fellow men in view, have been willing to stem the torrent of popular prejudice, and placing their philanthropy in opposition to their interest, have gone forward steadily, but perseveringly in the exalted labor of disseminating useful knowledge, and thereby doing good.

There needs an impulse of some kind to bring into action, for the benefit of farmers, and of themselves, the pens of a class of men who are scientific, practical, and successful husbandmen, who enjoy, alone, their intelligence, and suffer but a little of their light to shine upon others. I know many such men, who are in all respects qualified to become teachers.

The long evenings of the winter before us will present great advantages to the farmer for storing his mind with useful knowledge, and thereby qualifying himself for occupying with credit to himself, and the prospect of good to others, whatever station in life Providence may assign to them. They will also furnish ample time for farmers to fill up the pages of agricultural journals with such matter as shall be of real utility to others, and thereby do much to lighten the duties of editors, and prevent the necessity, on their part, of wading through volumes in order to make selections to fill their sheets.

I would say to you, Mr. Editor, do not be discouraged in the task you have undertaken, for I feel assured that the intelligence, the *interest* even of that portion of community for whom you are laboring, will eventually sustain you. *You are accomplishing good.*

And, dear sir, that you may meet with such success as your undertaking merits—that the friends and readers of the Genesee Farmer may find it one of their best and most pleasant *friends*, and that to them, and to you, the coming New Year, may be a *happy* one, is the sincere wish of your friend. W. P. W.

Milton, Saratoga County, Dec. 1837.

"ONLY 3 OR $400 A YEAR."

"Making only three or four hundred dollars a year," says my friend—"Only three or four hundred dollars a year; truly this is slow getting along." Now my friend was extensively engaged in money operations and land speculations, and was probably making his ten or perhaps fifty thousand a year; and when, in answer to his inquiries, I informed him that I was making some three or four hundred dollars a year, he was astonished at the smallness of the amount: with him it was merely the work of a day or an hour. Not so with me, I had purchased a small farm in the very suburbs of a fine growing city, and had been looking forward to the time when I should finish paying for the same; and thought then I should be happy and contented.

Soon after this I paid the last instalment due on my farm, and instead of being happy and contented, I put this down as the most uneasy period of my life. Land speculation was now in the full tide of successful operation—many of my friends and acquaintances had within a few months or a year, made their ten, twenty, fifty, and some their hundreds of thousands of dollars. Every thing was locomotive—and who could be content to labor on the farm, and only gain "three or four hundred dollars a year." There was a much shorter way to wealth. The merchant entrusted his business to the clerk—the mechanic left the work to the apprentice—the farmer, too, was in haste to be rich, left his business and engaged in land speculation. Some few, to be sure, stayed at home and attended to their own business; but they generally were considered as men without enterprise and almost destitute of common sense.

But to return to myself, I engaged in land speculation, and in a short time found myself not a few thousand dollars in debt; but I was successful, property was on the rise, and soon my purchases were worth more than double to what I had paid; and the little farm, which a few years before had cost me some fourteen or fifteen hundred dollars, was worth as many thousands. I determined to sell—was offered ten, fifteen, and eighteen thousand dollars. I consulted my friends, but one said it is not enough; another said, do not sacrifice your property, it is worth $25,000; a third said, hold on to it, and soon you will get $30,000. I did so, and now began to think myself a rich man, and every body about me was rich,—a few dollars, or even a few hundreds of dollars, were of little consequence. Thousands and tens of thousands—fine houses—fine horses and carriages—gold watches and gold chains—piano fortes—sofas, and other fine things, were all the theme.

But a great change came over the land. Lands failed to advance in price. Bonds and mortgages and notes failed to be quite as good as the ready cash. Many failed to meet their engagements, and not a few failed to be quite as rich as they had anticipated. The specie currency failed, the banks failed, and it is even said some ladies failed of marrying rich husbands, and some failed of getting married at all. In a word every thing failed.

But, Mr. Editor, I have said every thing failed. Not quite so fast. I have not failed to take the Genesee Farmer, neither have I failed to derive great advantages from the perusal of the same. I have not failed of making it a source of profitable investment, saving much more than the cost of it annually, by adopting the great improvements of the day. I have not failed to grow a good crop of the ruta baga turneps. I have not failed of clearing my barn yard in the spring instead of the fall, thus saving the whole value of the manure. I have not failed to fatten my hogs mostly on boiled apples, potatoes, and pumpkins, and from this item alone I have not failed to save more than the cost of all the papers I take, five in number. In a word, I now do not fail of making my "three or four hundred dollars a year," and with industry and perseverance, and with the blessings of divine Providence, I hope I shall not fail in a year or two more of paying the last instalment on my land speculations.

And now, brother farmers, let me say one word to you, and this too from experience. When you are doing *well*, just leave it for others to do *better*.

One word more, do not fail to take some good agricultural paper. You neglect to take one, and you neglect your own interest. It is worth much more than the cost. If you think you are not able to take the Genesee Farmer at $2, then take the Monthly Farmer at 50 cents a year—only one cent a week. I say again do not neglect your own interest. Pyrus.

Buffalo, Dec. 1837.

CHARCOAL FOR HOGS.

Mr. Tucker—Every means of saving food in fattening hogs, seeing that fresh pork is so cheap in comparison with the price of the fattening material, should be known by the farmer. Those are on the right side of the hedge who sold their hogs on foot for from 3½ to 4¼ cents per lb. which most or all could have got. Unless the owner has damaged grain, which he does not know how else to dispose of—soft corn for instance, or shrunk rusted wheat, it is ruinous work to fat and sell pork for 5 or 6 cents, which is all they now offer. The hogs will eat their heads off in a twinkling, at least as far as my experience goes. I would strongly advise all my brother farmers who can, to salt their pork themselves. Use the coarse bay salt, and pack down before it freezes, and there is no fear of its spoiling.

I took up my pen to recommend to my brother farmers the more general use of charcoal in fattening their hogs. I know it has often been recommended in your valuable paper, and I know too that it is seldom attended to. We all know that charcoal is mostly carbon. Now hold a piece of glass over a candle and see what a quantity of the *pure article* you get from fat. Lamp black is very pure carbon. With regard to the hogs eating it, I give

mine, 25 in number, about half a bushel a day, and they leave their corn for it, munching it in with the utmost zest. May it not be a remedy for those intestinal worms which are found so generally about the kidneys of hogs? I recollect reading of a hog that was a great favorite with the crew of one of our vessels, and suffered to run about the deck. One day he was missing, and as every one supposed that he had fallen overboard no great search was made. About two weeks afterwards the cook had to go down to the coal hole for a supply of coals, where he found his hogship, both fat and flourishing, with nothing within his reach but the coals.

The first opportunity I will describe an exceedingly pretty and convenient apparatus for steaming potatoes and other roots, and the most approved plan of a hog pen. K. A.

HOVEN IN CATTLE.

Mr. Tucker—Farmers are in general aware that when cattle are turned into fresh clover in the spring or summer, it often happens that they are attacked with bloating, and this unless speedily relieved is the cause of death. Many valuable animals are in this way lost every year. The effect has in general been attributed to the formation of gas in the stomach, and the efforts made to cure, have been directed to the liberation or absorption of this gas. This I believe is the general view of the matter. In conversation, however, with an intelligent farmer the other day, he remarked that this view of the subject was incorrect; that the difficulty arose from *swallowing*, as he expressed it, *the tongue;* or that the long tongue of the creature was turned down the throat, and that the efforts to swallow the obstruction, filled the animal to distension with air, and eventually caused its death; and I have since heard it asserted that among the German settlers of our country, all the mode of cure is simply to open the mouth and place the tongue in its natural position.

Is this view of the matter correct?—Can any of your intelligent correspondents give any information on the topic; or is this opinion, one of the errors yet remaining with the ignorant? That the tongue of the ox is long, flexible, and used for a variety of purposes to which that of the horse is inapplicable, is known to every one; if in addition to this he is liable when eating voraciously favorite kinds of food, to swallow the point of that organ, and thus produce the terrible results that spring from hoove or bloat, it should be generally known, that the remedy may be applied. Having had no experience in the disease, I know nothing myself respecting it; but as every one who owns cattle is liable to have them attacked, I have made the inquiry, and for one shall feel gratified to have your, or your correspondents', opinion, on the matter.

A Young Farmer.

Do not Discontinue your Subscriptions for the Genesee Farmer.

In this essay, and several successive ones, I shall consider myself as addressing that respectable class of citizens who have subscribed for the Genesee Farmer. As the times are hard, and money scarce, it may be that some of you harbor the thought of discontinuing your subscription. Dont do so. I beg you not to be hasty in coming to a determination, for the sake of a paltry sum, thus to deprive yourselves of one of the most estimable privileges, provided for farmers in modern times. Are you young men, or middle aged men, intending to be well informed and thrifty farmers, and sustain a respectable standing in the agricultural community, do'nt dincontinue your subscriptions for the Genesee Farmer. Or are you fathers, having sons to be trained to agriculture, do'nt discontinue your subscriptions. Provide the Farmer, or one of the Farmers, for the use of your sons, and encour age them to read it. There is no other reading on secular subjects that can be more useful to them. Excite in the minds of your sons a taste for reading agricultural periodicals, and my word for it, they will become farmers of the first order.

Be patient with me, my friends, while I offer a few reasons in justification of what I have said. The Genesee Farmer, either the weekly or the monthly, but especially the latter, costs but a very trifling sum. The cost of it is merely nothing, and yet it is an exceedingly useful paper; certainly it is so to such farmers as take any proper interest in it, and read it attentively. Are the times hard, and is money scarce? What then? Do these considerations justify the discontinuance of such means, now in your possession, as are known to be productive of gain? Will you stop sowing and planting, because the times are hard, and you find it difficult to get money enough to carry on the operations of your field culture? Or if you are in debt, will you for that reason neglect the use of such means, as are known to be likely to improve your circumstances, and relieve you from embarrassment? Now my argument is, that taking an agricultural paper is a *money making* business. In some way, though perhaps it may not be perceived, the trifling sum paid for it, is sure to come back, with tenfold interest. I do not, in general, advise to the use of borrowed capital, yet there may be exceptions. I say to you then, that if it should so happen, when you are called upon, as you may be soon, to subscribe for one or the other of the Genesee Farmers, you have not at the time money for that use, *borrow* it of one of your neighbors. Depend upon it, this will be practicing good economy, for the money will certainly come back, with a great increase. I have much more to say, and more to speak to you again. In the mean time, De'nt discontinue your subscription for the Genesee Farmer. Economicus.

Experiments in feeding Apples to Hogs, &c.

Proof of the value of Apples as food for cattle, sheep, hogs, &c., is every day accumulating, and we are gratified that so many of our farmers are making such good use of their surplus apples. The following communication was made to the Hartford county (Conn.) Temperance Society, at their meeting, on the 21st November last:

Dear Sir—Early in the fall of 1835, as soon as apples began to fall freely from the trees, I commenced feeding them to two swine, which were then about ten months old, and weighed alive, as near as I could judge, about 150 lbs. each. They were fed on raw apples and the common wash of the kitchen three or four weeks. After this I boiled the apples, and adding daily abont eight quarts of skim milk, fed them freely on this preparation with a few raw apples occasionally, as they would relish them. All the grain of any kind they had till November, was the bran of five bushels of rye, ground in the ordinary way for family use. After this time they had a small allowance of soft corn, about once a day, till two weeks or so previous to the time of their being butchered, when I commenced feeding them with sound corn, continuing the apples and the milk to the last. As near as I could calculate, they had less than two bushels of sound corn, and the soft fed to them was in value not equal to that. They were slaughtered when thirteen and a half months old, and weighed not far from 275 lbs., each. The pork was as pleasant and as solid as any that I ever made, and the quantity of lard as great as is common in shoats of that age.

Being so well pleased with this experiment, in 1836, I fed my fattening hogs in the same manner, only using less milk and more provender. They did well this year, but not so well as those which I fed on milk and apples. Whether the difference was owing to the use of more provender and less milk, or to the inferior quality of the apples in 1836, I am not fully satisfied, but suspect it may be in part owing to both circumstances; not that I think milk contains more nourishment than provender, but it is well known that swine are extremely fond of milk, and when mixed with pleasant boiled or steamed apples, it makes a kind of food, than which nothing perhaps is relished better by them. They do not cloy on that as they often do when fed freely on other grain. Here I would remark, that I find from experience that swine relish apples much better, and are much more benefited by them when fed out before they have undergone any fermentation; and I am led to believe that the saccharine matter contained in the apple, being changed into alcohol just in proportion as fermentation has progressed, is in the same proportion rendered useless. From what little experience I have had, I think they had better be fed out within 24 hours after being boiled.

I have made the experiment with all sweet apples, and all sour—also with a mixture of sour and sweet, and am satisfied that a mixture is to be preferred, and when boiled and prepared as mentioned above, swine will relish them better for a length of time, than they would all sweet or or all sour.

During the winter of 1835 and 6, I fed my sheep, especially the last half of foddering time, in addition to hay, potatoes, turneps, oats or corn, daily. During the last winter, I fed the same flock, consisting of 15, on the same kind, and, as nearly I could calculate, the same quantity of hay, without any thing in addition, except in the last half of the season about one and a half pecks of apples daily. And they appeared in better health—raised their lambs better, and with less trouble—afforded six ounces more wool a head, and at shearing time were decidedly in better flesh than they were the year before.

During part of last winter I fed apples to my horses—say one and a half pecks per day each—and thought that when worked as farmers ordinarily work their horses, they would keep in good flesh with one-third of the grain they would othorwise require.

For two years past I have suffered my cows and young cattle to lie in pastures, where during the season of their falling they would have plenty of apples. They have never injured themselves by eating too many, and there is no danger that they will do this, provided they have free access to them from the time they commence falling, or are fed gradually at first. They will do well with much shorter feed than they require without them—probably one half less. My cows have uniformly increased the quantity of their milk when suffered to eat plentifully of apples. Whether they are of any value to oxen that labor constantly, I am undecided, yet allow mine to have free access to them. Have for two winters past kept my store hogs in a great measure on apples, some raw and some boiled with a little milk or provender, and have no doubt this is one of the best uses to which they can be put.

From the limited experience I have had, I think a common sized fattening hog will consume from six to seven bushels of apples in a week, and that he will thrive as fast on them boiled, with the addition of 28 quarts of skim milk, as he would on as much as he would eat of any kind of grain. Now if a hog will consume one and a half bushels of corn with the above quantity of milk per week, (and one at all experienced in fattening swine will not doubt, I think, that he will consume all that quantity,) then estimating corn at six shillings per bushel, the amount is $1,50. This sum divided by six gives twenty-five cents, or divided by seven gives twenty-one and three-sevenths the worth of the apples per bushel, as an article for fattening swine. Indeed, such is my conviction of their value for this purpose, and for feeding to sheep, and even horses, that as a matter of economy, leaving conscience and the interests of temperance entirely out of the question, I should continue the use of them at the present prices of grain, unless I could realize at least three dollars per barrel for cider, free of the expense of transportation. Very respectfully yours,

D. Woodruff.

OXEN PREFERABLE TO HORSES.

The late President Madison, in one of his addresses to to the Agricultural Society of Albemarle, says:

"I cannot but consider it as an error in our husbandry that oxen are too little used in the place of horses. Every fair comparison of the expense of the two animals, favors a preference of the ox. But the circumstance particularly recommending him, is, that he can be supported when at work, by grass and hay; while the the horse requires grain and much of it; and the grain generally given him, Indian corn, the crop which requires most labor, and greatly exhausts the land. From the best estimate I have been enabled to form, more than one half of the corn crop is consumed by horses; including the ungrown ones; and not less than one half by other than pleasure horses. By getting free from this consumption, one half the labor, and of the wear of the land would be saved, or rather more than one half;—for on most farms one half of the corn crop grows on not more than two-fifths, and sometimes a smaller proportion, of the cultivated fields; and the more fertile fields would of course be retained for cultivation. Every one can figure to himself, the ease and convenience of a revolution which would so much reduce the extent of his corn fields; and substitute for the labor bestowed on them, the more easy task of providing pasturage and hay. But will not the ox himself, when at work, require grain food as well as the horse? Certainly much less, if any. Judging from my own obsesvation, I should say, that a plenty of good grass or good hay, will suffice without grain, where the labor is neither constant nor severe. But I feel entire confidence in saying, that a double sett of oxen alternately at work, and therefore half the time at rest, might be kept in good plight with no other food than a plenty of good grass, or good hay.

"And as this double sett would double the supply of beef, tallow and leather, a set-off is found in that consideration, for a double consumption of that kind of food. The objections generally made to the ox are, 1. That he is less tractable than the horse. 2. That he does not

bear the heat so well. 3. That he does not answer for the single plough used in corn fields. 4. That he is slower in his movements. 5. That he is less fit for carrying the produce of the farm to market.

"The first objection is certainly founded in mistake. Of the two animals, the ox is the more docile. In all countries where the ox is the ordinary draught animal, his docility is proverbial. His intractability, where it exists, has arisen from an occasional use of him, only with long and irregular intervals; during which the habit of discipline being broken, a new one is to be formed. The second objection has as little foundation. The constitution of the ox accommodates itself, as readily as that of the horse, to different climates. Not only in ancient Greece and Italy, but throughout Asia, as presented to us in ancient history, the ox and the plough are associated. At this day, in the warm parts of India and China, the ox, not the horse, is in the draught service. In every part of India, the ox always appears, even in the train of her armies. And in the hottest parts of the West Indies, the ox is employed in hauling weighty produce to the sea ports. The mistake here, as in the former case, has arisen from the effect of an occasional employment only, with no other than green food. The fermentation of this in the animal, heated by the weather, and fretted by the discipline, will readily account for his sinking under his exertions; when green food even, much less dry, with a sober habit of labor, would have no such tendency. The third objection also is not a solid one. The ox can, by a proper harness, be used singly as well as the horse, between the rows of Indian corn; and equ ally so used for other purposes. Experience may safely be appealed to on this point. In the fourth place, it is alledged that he is slow in his movements. This is true, but often in a less degree, than is often taken for granted. Oxen that are well chosen for their form, are not worked after the age of about 8 years, (the age at which they are best fitted for beef,) are not worked too many together, and are suitably matched, may be kept in nearly as quick a step as the horse. May I not say a step quicker than many of the horses we see at work, who, on account of their age, or the leanness, occasioned by the costliness of the food they require, lose this advantage, where they might have once had it? The last objection has most weight. The ox is not as well adapted as the horse to the road service, especially for long trips. In common roads, which are often soft, and sometimes suddenly become so, the form of his foot, and the shortness of his leg, are disadvantages; and on roads, frozen, or turnpiked, the roughness of the surface in the former case, and its hardness in both cases, are inconvenient to his cloven hoof. But where the distance to market is not great, where the varying state of the roads and the weather can be consulted; and where the road service is in less proportion to the farm service, the objection is almost deprived of its weight. In cases where it most applies, its weight is diminished by the consideration, that a much greater proportion of service on the farm may be done by oxen, than is now commonly done; and that the expense of shoeing them, is little different from that of keeping horses shod."

APPLICATION OF MANURE.

I am somewhat anxious concerning one branch of agriculture, viz: the manner of using manure. By what I can learn, it is a common practice with many farmers in our country, to hanl out their manure in the fall of the year on their grass ground, and drop it in one or more large heaps, for the purpose of moving it on to their broke up ground in the spring, whether their ground be ploughed in the fall or spring; and many drop their manure in small heaps on their ground, to spread just before ploughing the next spring. From reason and experience, I am satisfied the better way is to spread the manure on the ground in the fall. I aim to move and spread my manuure early'enough for the rains to wash the strength of it into the ground, before the ground freezes up; I generally spread it as fast as I haul it, but am very careful to spread it before there comes a rain on it. I am not so fearful of losing the strength of manure in the air. as some of our agriculturists profess to be, otherwise I might be tempted to suppose that a considerable part of it was made in vain. But I should say if any manure was made in vain, it is that which people plough in something like a foot deep, in its full strength. This method may be comparable to a woman's making a kettle of hasty-pudding by boiling water, then stirring in her meal, then let it get cool, and then stirring in a common portion of rock-salt, or some might think it would suit them better for her to hoist up her pudding and throw her salt under it. Now I should not suppose this fresh pudding would be very palatable, neither should I think that if one was to descend low enough to come at some of this good salt, that a stately lump of it between his teeth would relish any better.

Now is not the fault in the cook? The good woman had every ingredient, but she should have dissolved her salt in the water, then the pudding would be seasoned, and would suit almost every one's taste. Those farmers I first mentioned, if their ground was ploughed in the fall, move their large heaps on to it, and spread and plough it in; and if the ground was not ploughed in the fall, they will either spread it on the sward and plough it in, or spread it on the furrows and plough again, or else only harrow it, to their mortification, if they do not conclude to bury it in the holes.

Those who leave their manure in small heaps, mean to get it deep enough at one ploughing, and much stronger than if it had been spread in the fall; yet they have lost some of the strength by evaporation. Now I can tell them how they may recover their loss; let them spread the furrows where the heaps laid, on the ground where they will have the good of the evaporation the same season, and I guess that is the chief they will have. Now I do not hold to burying manure in its strength, deep in the earth,and if I have not given my reasons sufficiently, I will give some of them here. In the first place, it is obvious that manure in its natural state, or full strength, produces nothing of consequence. Secondly; when buried in the ground ten or twelve inches, it will remain nearly in the same state, unless washed, leached or drained. Thirdly; at such a depth as it is often placed, it must be a very great rain to convey more moisture to it than it will retain. Fourthly; if it should be drained, it will drain downwards, and not up. Fifthly; if the strength should all come out of it, the roots of corn or any other vegetables would receive but little nourishment from it, it being deeper than the warmth of the sun will suitably reach to render it fertile. Should any argue that they shall have the good of this manure another season; I should say, it is a chance if some of it is not out of their reach. My method is, after spreading my manure in the fall, to plough my ground in the spring, turning in the manure under the furrows, which is worth but little to keep the ground loose, and the furrows which are about six or seven inches deep, being richest at the bottom, will call down the roots of whatever is planted, deep enough to shield them from drouth, and not below the warmth of the sun. So that I esteem my method at least as much preferable to those before mentioned, as it would be, if I had a sum of money on hand, to let it out on interest in good hands for a season, instead of burying it, even if I must lose the value of one dollar by rust. Also, it is my opinion that an acre of ground may be ploughed six inches deep, with about two-thirds the cost that it can be nine inches deep, and manured with two-thirds the manure, and produce as good a crop.

—[*N. H. Patriot.* A Common Farmer.

Management of Sheep in Winter.

I have frequently thought that an open December, which is so often wished for by the farmer to save his winter's supply of hay, is more prejudicial to his sheep, when they ramble over the fields, and to his own interest, than he is generally aware of. It would certainly comport more with real economy, if he were to bring up his sheep by the 10th of December into winter quarters, even if the weather should remain warm and the ground uncovered. If they lose flesh at this time they cannot regain it until spring, and the mortality which sometimes costs flocks of sheep, is imputable to this cause.

Sheep in winter should have sheds; the preservation of their health requires this indulgence, and nature prompts to it. Let me ask, if they have the choice, do they remain in the open air in a storm? No—they as instinctively run to their covering as a man does to his house, and if they do not require it quite as much, they appear as grateful for the shelter. For a flock of poor sheep a protection from the weather is all important. Those in good condition do not so much want it, as they have a better coat both of flesh and wool; but for them it is likewise useful, and a good farmer will not omit to give all the requisite shelter.

As soon as sheep are brought into the yard, the different kinds of lambs, ewes and wethers, should be carefully separated and kept during the winter apart. It is important that those in one yard should be nearly of a size as practicable; for by being so, there are no strong ones among them to drive them from their provender. All will feed alike and do well. The flocks ought likewise to be as small as we can conveniently make them. It is an invariable rule that a small flock does much better than a large one, even if both, according to their number, are fed equally well. If the flocks in each yard can be reduced to between fifty and one hundred, so much the better; and it is a great desideratum to make them as few as fifty, if it can in any way be effected. It is likewise necessary to have a separate yard for old and poor sheep, and if there are any in the flock that do not subsequently do well, they should be removed into what is commonly called the hospital. These hospital sheep, by being few in number, having a good warm bed, a sheaf of oats, or a few screenings from under the fanning mill, once a day, will soon begin to improve and do well. I have had my hospital sheep in better condition with this care by spring, than any other flock, and I must say that for the last three seasons, my sheep were in a better condition when I turned them out of my yard in the spring, than when I put them up in the beginning of winter.

Sheep ought to be rather sparingly than sumptuously fed, three times a day, out of racks, to prevent them from running over and trampling on the hay. As soon as one is seen in any of the flocks to become thin, it ought to be removed at once into the hospital, where it will be better fed. If you neglect to do this, soon it will be too late, and you will suffer loss; for a sheep once reduced to a certain point cannot be recovered. It is good to give them a feeding of straw or pine tops, if you please; it invigorates their health, and makes a change in their food. They ought all to be daily watered, and if your hay has not been salted, they ought to have a lick of salt occasionally. By adopting these rules, you will save all your sheep; or you will not lose more of them than you would of the same number of horses and cattle. They will have no disease among them. I have often thought of an observation made to me by an experienced wool grower, from whom I asked for information of the diseases of sheep: he answered: "What have you to do with the diseases of sheep—take care of them and you will have no need for remedies." This observation struck me as strange at the time, but subsequent experience has amply confirmed it.—*Dr. Beekman.*

Household Economy.

A great deal may be saved in a family, and order and comfort promoted, by the mistress knowing *how things should be done*, though she may not be required, in all cases, *to do them herself*. And a vast deal wasted, and many families ultimately reduced to want, for lack of economy in the household, and of intelligence and good supervision on the part of the mistress. The duty of women is to manage well the affairs of the household; and to qualify them for the performance of this duty, *girls* should learn what they ought to practice when they become *women*. Nothing is so great an accomplishment in a young married female—nothing of which a young husband is so proud—and certainly very few things so conducive to the welfare and happiness of the married life—as a familiar acquaintance with domestic duties, and a cheerful willingness to perform them with fidelity. Though we do not intend to assume the office of instructor in these domestic duties, we are willing, occasionally, to act the part of an auxiliary. With this view, we have published, with the aid of our correspondents, ample instructions for the economical fabrication of Indian corn into human food, in a great variety of forms. As bread is virtually the "staff of life,"—as good bread is more healthy and nutritious, and withal far more palatable than bad bread, we shall here offer some further remarks upon this subject.

TO MAKE GOOD HOUSEHOLD BREAD.

Mix four ounces of salt, three quarts of water, a pint of yeast, and a peck of flour—seconds is more wholesome than superfine, though less white—in a trough; when properly fermented, knead and divide it into loaves, and bake till done. 56 lbs. of flour will weigh 69½ lbs. when baked.

TO MAKE POTATOE BREAD.

Wash and boil good sized potatoes, peel and mash them fine, or pass them through a seive; add two or three parts of flour to one of potatoes, and a little more yeast than usual. Knead well, and allow the dough to stand a proper time to ferment, and bake. The bread is palatable to many, and as wholesome as wheaten bread, and effects a considerable saving of flour, which may be an object in scarce times.

TO MAKE PUMPKIN BREAD.

Boil a good pumpkin in water, till it is quite thick, pass it through a sieve, and mix flour so as to make a good dough. This makes an excellent bread. The proportion is increased at least one-fourth, and it keeps good a length of time.

MR. DOSSIE'S DIRECTIONS.

To make *good* bread, take of fine flour six pounds; of water, moderately warm, but not hot, two pints and a half; of liquid yeast, eight spoonfuls; and of salt, two ounces. Put a pint of the warm water to the yeast, and mix them well, by beating them together with a whisk. Let the salt be put to the remaining part of the water, and stirred till completely dissolved. Then put both quantities of the fluid gradually to the flour, and knead the mass well, till the whole is properly mixed. The dough must stand four or five hours in a warm place, to rise, and then be baked without delay. When properly managed and baked, the above ingredients will have lost about one pound two ounces in weight, so that the loaf will weigh seven pounds twelve ounces.

FRENCH MODE.

Put a pint of milk to three quarts of water, in winter scalding hot, in summer blood warm; add salt, and a pint and a half good yeast. Pour the yeast into the milk and water, and break in about five ounces of butter.—Work it well till it is dissolved. Then beat up two eggs in a basin and stir them in. Mix about a peck and a half of flour with the liquor, and in winter make the

dough pretty stiff, but more slack in summer; mix it well and the less it is worked the better. Let it lie to rise while the oven is heating. When the loaves have lain in a quick oven about a quarter of an hour, turn them on the other side for about a quarter of an hour longer.

Wheat and Indian, rye and Indian, and *wheat and rye bread,* are made in the ordinary way. The New England *rye and Indian,* generally contains one part of rye and two of Indian. The other mixtures may be varied at pleasure. Bread containing Indian meal requires a hotter oven, and is longer in baking, than other bread.

GROWN WHEAT,

According to Davy, is apt to contain a small quantity of prussic acid, highly deleterous. He directs to dry the grain in an oven; this stops the progress of germination. With flour made of such damaged wheat, mix one-half of good sound flour; and for each pound of the damaged flour, mix from 30 to 40 grains of common carbonate of magnesia, i. e. uncalcined magnesia. A like quantity of common whiting may be substituted, 20 or 40 grains, for the magnesia; or for want of both, 25 grains of pot or pearlashes, or a tea-spoouful of strong ley.

Dyspeptic Bread is made from flour not bolted, containing the bran, in the ordinary way.

GENERAL REMARKS.

New baked bread contains a large portion of indigestible paste, which may be rendered less unwholesome by allowing it to stand a day, or by toasting it. Stale bread, in every respect, deserves the preference to that which is newly baked; and persons troubled with flatulency, cramp of the stomach or indigestion, should abstain from new bread, and particularly from hot rolls.—*Cult.*

From the Maine Farmer.

SIDE HILL PLOUGH.

MR. HOLMES:—I have for some time past felt desirous to call your attention and the attention of the agricultural community to the Side Hill Plough. There are several kinds of ploughs so called, but I mean that with a rolling share and mouldboard. You doubtless have seen them and perhaps know much better how to estimate their value than I—but what I have seen of them and the use I have made, and the experience of others much better qualified to judge of their worth than I, have convinced me that they ought to take the place of all other ploughs, as possessing all the good properties of the best cast iron ploughs, to which is to be added those of turning the furrow to either the right hand or the left.

They are not patented. They are manufactured by Mr. Nourse of Worcester, Mass., and were introduced into this town by Samuel Davis, Esq.

There are now in, and within 2 or 3 miles of this village, two dozen or more of them in actual use, and I believe every man who has tried them is entirely satisfied with them, and has either gotten one for his own use, or is determined to have one the first opportunity.

They are not only applicable to the side hill, but equally so to level grounds, entirely superceding the necessity of a central or dead furrow. I have had my ploughing done for two years past with this kind of plough, and I do not hesitate to say that the ploughing has been as well done as it could have been done with any other plough in use.

I held the plough one half day to break up land that had been mowed about five years. One yoke of oxen was all the team necessary. The work was done with ease to the cattle, and the man who owned the cattle and who drove them for me, has since purchased one of the ploughs for his own use.

One of our citizens contracted to build, and built a new road of about one mile on the shore of a pond where he was under the necessity of ploughing upon one side of the road altogether—he purchased one of these ploughs on purpose, and now says, he more than cleared the price of it in the time of his team and hands which would otherwise have been spent in traveling without ploughing. Much more might be said in favor of these ploughs, but my only object is to call the attention of those farmers who are about purchasing ploughs to do their fall ploughing. To such I would say—don't purchase until you have seen and are satisfied. All that will be necessary to satisfy you will be to try, and I am certain you will buy.

They need no more recommendation in this vicinity—there will be very few other ploughs used in one or two more years.

Yours, very respectfully,

A FRIEND TO AGRICULTURE.

Mt. Vernon Village, Sept. 6, 1837.

AN EXTRAORDINARY CALF.

There is at present on a farm near Baltimore, a calf which was got by a full bred Durham bull, out of a three-fourths Durham and one-fourth Devon cow, which at 6 days old, weighed 142 lbs., at 61 days old his weight was 322½ lbs., and at 3 months old he weighed 427½ lbs. These respective weights were accurately ascertained in the Western hay-scales, and prove incontestibly that the *cross* has by no means impaired or lessened the bulk of this fine animal; indeed we know it to be the opinion of one of the most intelligent breeders in this country, the Hon. Charles A. Barnitz, that for all the purposes of the dairy, one-fourth Devon blood in a milch cow is a great addition to the buttyraceous qualities of a milch cow, it being his opinion that this proportion of admixture increases the *richness* of the milk without subtracting in the least from its *quantity.* This fact was most satisfactorily proved by his celebrated Butter-cow, Flora, which when fresh in milk, gave 20 lbs. of butter per week. Flora was sold about 2 years since to Major Frederick Haines, of Marietta, Pa., who was recently offered $400 for her. She is ¾ths Durham and ¼th Devon, and is besides one of the most perfect models of a cow to be found either in this country or England. Her present owner has a fine heifer calf out of her, which we hope may inherit all the good qualities of her far-famed dam, for surely no one is better entitled than the Major to the possession of first rate animals, as no one has exerted more sagacity or zeal in their obtainment.

But to return to the calf in question; in addition to his immense weight, he is a perfect model of what the genuine Durham should be in all the points that give that noble race character and caste. If the reader should ask who is his breeder, we must answer, sub rosa, that he may be found in the person of "Mine Host" of the Fountain Inn.—*Farmer & Gardener.*

AGRICULTURAL SOCIETIES.

It is with no ordinary feelings of pleasure, we perceive by our exchange papers, that the agricultural communities throughout the country, are becoming sensibly alive to the propriety, nay necessity, of establishing Agricultural Societies. This feeling augurs well for the interests of husbandry, and should be cherished by every one, however remotely he may be connected with the cultivation of the earth. Farmers and planters form, after all, the great interest upon which all others must mainly rely for individual as well as national welfare; they are indeed the bone, sinew and muscle of the country; for however beneficially the labors of other departments of human life may be exerted, the *country* would cut but a sorry figure, if the labors of the plough were suspended, or any sudden disaster were to blight the products of the earth. Such being the case, it behoves those engaged in a calling at once so dignified and important, to exert every means within their power to fulfil the high obligations confided to them. In England prior to the creation of agricultural associations, the condition of agriculture was most lamentably defective, and the earth did not produce more than a moiety of its present yield. The reader is most sensibly impressed with this truth, in reading Mr. Arthur Young's tours, as well as in the writings of the lamented Sir John Sinclair. But we need not go out of our own country to find instances of the kind, as it will be admitted by all intelligent men, that notwithstanding the small number of such societies which now exist in America, their influence has been widely and fortunately felt. Show us the county in which such an institution is located, and is now in healthful action, and we will show you a section of country in which evidences of the improvement of the soil and of stock, increase of product and of profit abound. The very circumstances of meeting together to confer upon subjects connected with the culture of the earth—to consult upon objects and measures, in which each feels a common interest, tends to bind the whole together by ties of almost fraternal strength, to infuse into each a spirit of enterprise and emulation, which in the race for rivalry never fails to end in the achievement of private and public good. Such assemblages may be compared to meetings upon *neutral ground,* where discussions of the highest moment may be carried on with the utmost advantage to the parties to it; where instead of the introduction of antagonist principles, creating collisions, heart-burnings and dissensions, the communion of brethren upon matters of the profoundest import to all, serve to bind them closer together, and awaken none but the most friendly feelings. Here the opinions and intelligence of states or counties may be concentrated—here the practice of one district is laid open to the inhabitants of another, and here, however well versed a farmer or planter may be in the mysteries of his calling, he may learn something that will prove of advantage to him on his return home; for the wisdom of the world belongs not to any single individual, however gifted he may be.

These being our views, we would respectfully urge upon our agricultural readers throughout the country, in every county where there is not a society already formed, to go to work with a holy zeal, and rest not until they have succeeded in forming one.—*Farmer & Gardener.*

Value of the Willow.

The importance of the willow to man has been recognised from the earliest ages; and ropes and baskets made from willow twigs were probably among the very first of human manufactures, in countries where these trees abound. The Romans used their twigs for binding their vines and tying their reeds in bundles, and made all sorts of baskets of them. A crop of willows was considered so valuable in the time of Cato, that he ranks the salictum, or willow field, next in value to the vineyard and the garden. In France, the leaves, whether in a green or dried state, are considered the very best food for cows and goats, and horses, in some places, are fed entirely on them, from the end of August till November. Horses so fed, it is stated, will travel 20 leagues a day without being fatigued. In the north of Sweden and Norway, and in Lapland, the inner bark is kiln-dried and ground, for the purpose of mixing with oatmeal in years of scarcity. The bark of the willow, and also the leaves, are astringent; and the bark of most sorts may be employed in tanning.—*Arboretum Brittanicum.*

The American Colonization Society held its annual meeting at Washington, on the evening of the 12th inst. Hon. Henry Clay is the President.

The Rohan Potatoe.

THE subscriber has a quantity of Rohan Potatoe for sale. They were raised by him from seed obtained from France, and he believes them to be the most productive potatoe known, and a superior variety for the table. Letters (post paid) addressed to the subscriber at Cattskill, N. Y., will be promptly attended to, and the potatoes reserved for those who order till the spring, if they cannot be sent before.

Cattskill, Nov. 15, 1837 -f4t* JOHN A. THOMPSON.

Seeds for 1838.

JUST arrived at the Rochester Seed Store, a large importation of English Field and Garden Seeds, of the growth of 1837; shipped from London this fall expressly to our order, and comprising a full assortment of the choicest kinds, such as

Cabbage,	Ruta Baga,	Rye Grass,
Cauliflower,	Mangel Wurtzel,	White Dutch
Brocoli,	Sugar Beet,	Clover,
Radish,	Lucern,	&c., &c.
Turnep,	Trefoil,	

These Seeds are from one of the best establishments in Europe, and the perfect satisfaction which they have hitherto given, is sufficient guarantee of their character.

Dealers and others supplied at wholesale on very favorable terms. REYNOLDS & BATEHAM.

nov18 fit

Monroe Horticultural Garden & Nurseries, Greece, Monroe Co., N. Y.

THIS establishment now comprises over 20 acres, covered compactly with Trees and Plants in the different stages of their growth.

The subscriber offers to the public a choice selection of Fruit Trees, of French, German, English and American varieties, consisting of Apples, Pears, Plums, Peaches, Cherries, Apricots, Nectarines, Quinces, Currants, Gooseberries, Raspberries, Grape Vines, Strawberries, Ornamental Trees, Shrubs, Plants, Hardy Roses, Vines, Creepers, Herbaceous Perennial Plants, Bulbous Roots, splendid Pæonies, Double Dahlias, &c. &c.

Also, a large collection of Green House Plants, of choice and select varieties, in good condition.

Orders respectfully solicited. Trees and Plants, when ordered, are carefully selected and faithfully packed, and if desired delivered on the canal one mile from the Nursery, or at Rochester.

Orders for Mr. Rowe's Nursery received by the publisher of this paper.

Catalogues will be sent to every applicant gratis, or may be had by calling at the office of the Genesee Farmer.

April 1, 1837. ASA ROWE.

ERGOT IN GRAIN.

Bread being the acknowledged "staff of life," it is of the utmost importance that it should be made of the best of materials. From an Essay on the causes and effects of fevers, &c., published in London, by THOMAS WHITLAW, we take the annexed interesting extracts relating to the effects of the ergot in rye.—*Worcester Pal.*

"Rye is liable to be diseased by an insect depositing its animalculæ in the grain, which causes it to sprout and produce an excrescence like a cock's spur, of a hard texture. When ground down with the flour, or used in distillation, it proves a mortal poison; and at times has proved a pestilential scourge of Europe; it has been equally fatal in America, and is supposed to have been the chief causes of the plague in London. In 1811 and '12, a great number of lives were lost from the spurred rye being used for food, and the liquor distilled from the rye. The great mortality was chiefly confined to New York and Vermont. Upwards of twenty thousand victims fell a sacrifice to the ravages produced by that dreadful poison. Meeting after meeting of the faculty took place, to endeavor to discover the cause; and after the most mature deliberation, it was discovered by Dr. Hosack and his party, that it was a poisonous miasma floating in the air, confined to certain prescribed limits, and affecting certain persons, more particularly those that were in the habit of drinking gin;—the best apology for their ignorance of the true cause—the ergot or spurred rye. What made their report the more ridiculous was, that there was at the time, a fine, clear black, hard frost, and the healthiest weather that could be imagined. Many of the members were skeptical, and could not believe the report; they thought, that owing to the fine weather, it was impossible for contagion to exist in the air; others were of the same opinion with the doctors. One of the non-contagionists wrote and requested me to go to Albany, where the disorder was raging, and wished me to endeavor to discover the cause of the afflicting calamity.

On my journey from New York to Albany, where the legislature of the State was sitting, I stopped at a place called Kinderhook, and being cold, contrary to my usual practice, I drank a glass of gin. I had not drank it many minutes, before it affected me as if I had taken something boiling hot into my stomach. Although I immediately took an emetic, which produced the most active effects, the poison had taken so firm a hold of my constitution, that my throat and rectum were extremely painful. I had a cold perspiration towards morning, with a pain in my bones and head, whereas I was in perfect health before I had drank the gin. I accused the tavern keeper of putting poison in the gin; a gentleman of the town who heard me, and had observed that the habitual gin-drinkers in the place had died, seconded me in my charge. The landlord declared he was innocent, and referred us to the distillery. Upon our applying, the distiller was much alarmed at our charge of putting poison in the gin; and added, it would be his ruin if the report got abroad, in consequence of the great mortality. He took a voluntary oath, and assured us that he put nothing but the pure grain in his gin, and invited us to see the grain in the still house loft. We found it on inspection, badly cleaned, and probably one tenth of it spurred rye, or rye vitiated by being infested with the clavus or ergot. I was quite astonished when I saw it, particularly as it was so well described by Dr. Darwin, as being a pestilential scourge in various parts of Europe, producing what is called by Dr. Mason Good, in his history of medicine, mildew mortification; in America it was vulgarly called the dry rot. On dissection, I have observed that the windpipe and rectum were so completely parched by the action of the air stimulating or attracting the effects of the poison to the parts, that when pressed they would give way and appear like black snuff.

I lost no time in repairing to Albany. On my arrival, the inhabitants were in mourning, on account of the loss of their relatives and friends, some of whom had risen in health in the morning, had eaten a hearty breakfast, and at noon were in eternity! Such were the rapid effects of that inflammation, which was ascribed by the doctors of New York, to the air of Albany being charged with the damps of death. The members of the Assembly of the State had at the time, under their consideration a resolution to enable them to remove the State Legislature from Albany; it was expected that the resolution would be carried the same night, to the great and irreparable injury of the inhabitants. To the friend who was waiting for me at the hotel, I communicated the glad tidings of having discovered the cause of the disorder. He immediately ran to the assembly room, and obtain the members' consent to adjourn the question until the following morning. The tavern where I was, was soon crowded by the citizens, all anxious to know the cause. It was no sooner communicated, with a detail of my own sufferings, than the members searched the book-shops and libraries, and found to their great satisfaction, that the ergot was capable of committing the ravages upon mankind that I had represented to them. One of the skeptical of the faculty, on being requested to analyze the article, and report on the subject, took a few of his acquaintances some distance into the country to dine at his father's farm, where an opportunity offered to prove whether the ergot was injurious or not, for a large quantity of it that had been separated from the rye had been given to the pigs, and from its fatal effects, (as it caused their death the next day,) the father became a convert to the opinion. A number of rats, cats and dogs fell a sacrafice to its effects before the skeptical were convinced.

The animalculæ do not always come to perfection; when they do, the color is black, and in this state, a few grains would destroy life. The insect resembles that found on the potatoe, with shining black crustaceous wings, a greenish yellow belly and fiery-looking legs; and contrary to the nature of all other insects, it is most active in frosty weather. The *lelium temulentum*, a species of rye grass, is very subject to be effected with the ergot; and when eaten by horses, it is sure to kill them."

"Thinks I to myself."

We are indebted to a worthy and observing friend for many of the following hints.

When I see a farmer's sink spout without any vegetable or other matter under it for an absorbent, "thinks I to myself" the owner is either slovenish or careless, or both.

When I see a mass of chips accumulated in a farmer's back yard, remaining year after year, "thinks I to myself," if the courser ones were raked out, they would serve for fuel, while the finer parts with the addition of soap-suds, &c. from the house would afford a valuable source of manure.

When I see a convex barn-yard, "thinks I to myself," there is comparatively but little manure made there.

When I see banks of manure resting against a barn during the summer season, serving only to rot the building—"thinks I to myself," that manure might be better employed.

When I see the drainings of a barn-yard finding their way into gullies and rivulets, while with small expense it might be thrown on to a valuable swell or declivity, "thinks I to myself," that farmer is blind to his own interest.

When I see a hog yard not well supplied with materials for making manure, "thinks I to myself," that man suffers loss for want of care.

When I see a piece of hoed ground in a mowing field, and the turf stalks and stones that were carried out by the plough or harrow not collected together, "thinks I to myself," there is something slovenish in the case.

When I see ploughing done year after year in the same track by the side of a fence or a gulley, till a dyke of considerable height is thrown up, and of course a corresponding leanness in the interior, "thinks I to myself," there is a want of good husbandry.

When I see a stone wall topped out with a single tier of round stones, "thinks I to myself," the upper foot in the height of such walls ought never to have been put on, and look out for dull scythes and loss of hay.

When I see fruit trees loaded with twice the top necessary for bearing well, and this perhaps partly dead, thereby keeping the needed rays of the sun from the under crop, "thinks I to myself," here is an indication of bad husbandry.

When I see stones piled around the trunk of a fruit tree, "thinks I to myself," here is an invitation to suckers and to mice, and if dull scythes should follow, it would not be strange.

When I see a total failure of a crop of Indian corn, "thinks I to myself," if that man had bestowed all the manure and perhaps two-thirds the labor on half the ground, he would have had a fair crop and a fine piece of ground for a crop of Ruta Baga the following year.

When I see a farmer selling his ashes for ten cents per bushel, "thinks I to myself," he had better have given the purchaser fifty cents to leave it for his corn and grain.—*Maine Farmer.*

Chillblains.

This affection forms one of the most troublesome of the small troubles incident to cold weather. The cause of chillblains is generally to be traced to sudden transitions from heat to cold or the reverse. Exposure to cold and wet united, and particularly immersion in snow water, are causes of chillblains. Accordingly, they do not always occur during the continuance of intense frost, but are often more troublesome when the temperature begins to be milder by a thaw. It was observed by the celebrated Larry, in the winter campaign of the French in Russia and Poland, that but a few days before, and a few days after the battle of Wagram, the thermometer was very low, from ten to fifteen degrees below zero; and yet during that time there was no mortification, nor did any other particular suffering about the hands or feet occur. But about two days after the battle a thaw took place, the thermometer rose from ten to twenty degrees, and then a great number of cases of mortification of the feet occurred in the army, in some particular divisions that were much exposed, and nearly all the soldiers suffered more or less.

Chilblains occur most frequently in persons of a feeble constitution and delicate skin. Hence they are common in females and in children. Like many other evils they are more easily prevented than cured. The means of prevention are, first, such as tend to diminish the susceptibility of the surface, and second, such as protect it from vicissitudes of temperature. Among the first there is nothing better than cold water and thorough friction with a coarse towel. Among the most popular remedies for chilblains may be mentioned a strong brine, vinegar, camphorated alcohol, oil of turpentine, and other articles of this class. We have lately seen recommended the tincture of iodine as a wash, which is said to bring the parts to a healthy state. A solution of the chloride of lime, in the proportion of one part to twenty-four parts of water, has been found to answer a good purpose. Another wash which has produced excellent effects is prepared by adding one part of tincture of flies to six parts of liquid opodeldoc. With this the affected part should be frequently rubbed. When the skin has broken, and the part has assumed the character of a sore, regular medical treatment must be resorted to, as the matter then becomes too serious for quackery. —*Phil. Herald.*

Spring Wheat.

A SUPPLY of the celebrated Italian Spring Wheat just received from Rome.

Also, the Siberian Beardless Spring Wheat, much cultivated and highly recommended in the northern part of this state. For sale by REYNOLDS & BATEHAM.

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Fruit Trees For Sale.

THE subscriber respectfully informs his friends and the public that he has for sale at his Nursery in Rochester, Monroe county, state of New York, a large quantity of Fruit Trees, grafted and innoculated with the most approved kinds, now fit for transplanting, which he will sell on the most reasonable terms. SAMUEL MOULSON.

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N. B. CASH will be paid for a few thousand two years old APPLE TREES

Farmer's School Books.

THE Farmer's School Book, edited by J. O. Taylor, published at the Albany School Book Depository. First Lessons on Political Economy, for the use of Schools, by John McVicker, published at the Albany School Book Depository.

The above valuable books are for sale at the Albany prices by HOYT & PORTER.

Rochester, Nov. 11, 1837.-f3t